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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,308	07/29/2003	Zhong Zhang	TPIP018	6429

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EXAMINER	
GEMBEH, SHIRLEY V	
ART UNIT	PAPER NUMBER
1614	

MAIL DATE	DELIVERY MODE
11/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/629,308	ZHANG ET AL.	
	Examiner	Art Unit	
	Shirley V. Gembeh	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-14 and 17-24* is/are pending in the application.

4a) Of the above claim(s) [redacted] is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8-14* is/are rejected. * 17-24

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/14/07;1/30/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/03/07 has been entered.

The response filed **3/6/07** presents remarks and arguments to the office action mailed **6/29/06**. Applicant's request for reconsideration of the rejection of claims in the last office action has been considered.

Applicant's arguments have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 5/17/07 and 1/30/07 are acknowledged and have been reviewed.

Status of claims

Claims 1-6, 8-14, 17-24 are pending.

Claims 7 and 15-16 are cancelled and claims 1-3, 5-6, 13-14 are amended.

Claims 17 to 24 having the status withdrawn are not withdrawn. The withdrawal of claims 17-24 arenot recognize as written. The claims broadly recite excipient without any limitation, thus would be considered as pending not withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glen et al US 4,452,817 in view of Meadows et al., US 7,166,303.

Glen et al. teach the instant claims 1, 4 and 14(a), an aqueous formulation comprising: a. 2,6-diisopropylphenol (propofol) 1-2 %. See col. 7 lines 17-24 of said formulation as required claim 1, block-copolymer PLURONIC F68- commonly known as Poloxamer 188 or P188 (10%). Citric acid (see col. 3, lines 7-10) as in claim 2. Glenn also teach the PEG to be 10 %(an excipient) as required by instant claim 5. See col. 3, lines 30-31). The formulation further comprises antimicrobial excipients as required by instant claim 6 a(i) as sodium metabisulfate (see col. 3, lines 3).

Meadows et al. teach propofol comprising poloxamer 407 and poloxamer 338. See col. 6, lines 19-23. As required by instant claim 3, items cccc-ffff. The propofol concentration is disclosed as 0.5-2 % and the excipients in a concentration of 5-15% is taught and the composition do not comprise of lipid. See col. 7, lines 1-4 and 33-35.

The reference also teaches with regard to instant claim 9(a), the aqueous formulation does not support microbial growth see col. 7, lines 39. Further, Meadows et al. teach the formulation is equivalent to that of Diprivan a lipid formulation base is compared in animals (Wistar rats), at col.13, lines 34-col 14, lines 23-67 as required by instant claim 10(i). Meadows et al. do not teach the duration of the sterile formulation as required by instant claim 1, nor teach the poloxamers in the purified form as required by instant claim 13. However, the reference teach the solubilization of propofol into aqueous solutions have infinite long-term stability. See col. 9, lines 43-67. As to the poloxamer in the purified form, one of ordinary skill in the art would have been motivated to use a purified polaxamer for the administration to humans or animals

because one of ordinary skill in the art would know that impurities give adverse effect or may form complexes with other agent and inhibit the efficacy of the drug.

The cited references fail to teach instant claim 8, the ingredients comprising the aqueous formulation are taught, therefor will have the same property as that disclosed in instant claim 8. As stated in the MPEP 2112.01"Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not."

With regard to the temperature, absent factual evidence, it is kept at room temperature.

One of ordinary skill in the art would have been motivated to combine the cited prior art, formulate an aqueous solution of propofol that is free of lipid, comprising poloxamer in a mixture with other poloxamers because Meadows et al. teach the maximum concentration of propofol is enhanced. See col. 5, lines 56-67.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glen et al., US 4,452,817 in view of Meadows et al., US 7,166,303 as applied to claims 1-6 and 8-14.

Claims 17-18 and 21 are discussed above with regard to the composition of propofol.

Meadows et al. teach diprivan (propofol marketed under the trade name), comprising a water –immiscible solvent, where in the water-immiscible solvent is soybean oil as required by instant claims 19-21. See col. 1, lines 20-32.

With regard to instant claim 24, Meadows et al. teach the solution in an ampule. Absent factual evidence, the storage device is inert to propofol. One of ordinary skill in the art would use a container that will have no effect on the said composition because the Meadow reference teaches the solution can be provided in any suitable container appropriate to maintain sterility. See col. 8, lines 17-22. Thus will not cause substancial propofol degradation since the ampoule will have no effect on the said composition.

Glen et al. also teach the propofol composition comprising polyethylene glycol, ethanol as required by instant claim 22. See col. 6, line 28, examples c.

One of ordinary skill in the art would have been motivated to combine the above teaching and formulate a propofol composition comprising soybean oil in a container that will not effect the solution because the combine references teaches so. The addition of polyethylene glycol or ethanol has been used in the prior art prior to the claimed invention. Therefore, one of ordinary skill in the art would have been motivated to use the agent in a composition of propofol and expect a successful result.

Thus, the claimed invention was prima facie obvious to make and use at the time it was made.

Maintained Double Patenting

Claims 1-6 and 8-14 remain provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,3,17-50 of U.S. Patent Application No. 10/677,747. Although the conflicting claims are not identical, they are not patentably distinct from each other. The reasons are as follows:

Both sets of claims refer to an aqueous pharmaceutical composition with propofol. The current application claims obvious variations of the copending application claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's request that the Double Patenting rejection be held in abeyance until it is made permanent is noted but will be maintained in this Office Action and future Office Actions until withdrawn.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley V. Gembeh whose telephone number is 571-272-8504. The examiner can normally be reached on 8:30 -5:00, Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ardin H. Marschel 10/29/07

ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER

SVG
10/24/07